CLAIMS

What is claimed is:

1. A stance guide comprising:

(a) a foot engaging means for guiding and engaging at least one foot of the user;

(b) a body engaging means for guiding and engaging at least one part of the user's body; and

(c) a framing structure connected to said foot engaging means and said body engaging means

whereby the stance guide helps the user achieve and hold one or more pre-determined stances S_j, where j = (1, 2, . . . N) and N >=1, such that the achievement and holding of each S_j provides a corresponding health benefit to the user.

2. The stance guide of claim 1 wherein the structural dimensions of the foot engaging means relevant to guiding and engaging the user's feet and body are adjustable thereby accommodating a pre-determined range of user body and feet variation.

3. The stance guide of claim 1 wherein the structural dimensions of the body engaging means relevant to guiding and engaging the user's feet and body are adjustable thereby accommodating a pre-determined range of user body and feet variation.

4. The stance guide of claim 1 wherein the structural dimensions of the framing structure relevant to guiding and engaging the user's feet and body are adjustable thereby accommodating a pre-determined range of user body and feet variation.

5. The stance guide of claim 1 wherein said body engaging means further comprises a hand engaging means for guiding and engaging at least one of user's hands.

6. The stance guide of claim 1 wherein the foot engaging means further comprises a foot engagement sensing and signaling means for sensing and signaling the correctness of engagement of the user's feet.

7. The stance guide of claim 6 wherein the foot engagement sensing and signaling means further comprises a timing device for timing the duration of correct engagement of the user's feet.

8. The stance guide of claim 1 wherein the body engaging means further comprises a body engagement sensing and signaling means for sensing and signaling the correctness of engagement of the user's body.

9. The stance guide of claim 8 wherein the body engagement sensing and signaling means further comprises a timing device for timing the duration of correct engagement of the user's body.

10. The stance guide of claim 1 further comprises an optional pre-recorded video medium demonstrating the actual achieving and holding of said stances S_j as a training tool.

11. The stance guide of claim 10 wherein said video medium is a VHS cassette, a DVD disk or a VCD disk.

12. The stance guide of claim 1 further comprises an optional display device, connected to said framing structure, for selectably displaying one or more of said stances S_j as a visual aid to achieving and holding said stances S_j.

13. The stance guide of claim 1 further comprises an optional display device, connected to said body engaging means, for selectably displaying one or more of said stances S_j as a visual aid to achieving and holding said stances S_j.

14. The stance guide of claim 1 wherein the body engaging means further comprises a safe guard means for reducing the risk of an accidental fall of the user while trying to achieve and hold said stances S_j.

15. The stance guide of claim 1 wherein the framing structure further comprises a safe guard means for reducing the risk of an accidental fall of the user while trying to achieve and hold said stances S_j.

16. The stance guide of claim 5 wherein said stances S_j comprise S_1, S_2, S_3 and S_4 being characterized by, with an x-y-z Cartesian coordinate wherein the x-direction is where the user body faces, the y-direction runs from the user's right shoulder toward his left shoulder and the z-direction runs vertically upwards:

(a) S_1: both feet flat with heels against the ground and centered in a sagittal plane of the body, left foot in front of and spaced as far ahead of right foot as possible, left knee bent about 110 degrees, right knee as straight as possible while keeping the body weight on the left foot, overall back formed a straight line with the right leg, upper back arched and shoulders curved forward, upper arms naturally down, lower arms pointing in the x-direction with both hands made into a fist palm side up while continuously keeping the body weight on the left foot;

(b) S_2: mirror image of S_1 regarding left/right foot and left/right arm;

(c) S_3: feet, legs, overall back, upper back and shoulders same as S_1, upper left arm ahead of upper right arm with left elbow slightly ahead of left wrist, left hand in an open-palm, Christian style praying orientation except having a bent thumb, in the x-direction, and having an index finger separated from the rest of the fingers, left thumb positioned at the same height as but about five (5) inches ahead of the heart, lower right arm pointing approximately in the y-direction with right elbow slightly ahead of right wrist, right hand made into a fist with palm side up and positioned about three (3) inches below the user's belly button while continuously keeping the body weight on the left foot; and

(d) S_4: mirror image of S_3 regarding left/right foot and left/right arm

and wherein, accordingly:

(e) said foot engaging means further comprises a front foot panel and a rear foot panel, connected to each other by a backbone beam with both panels oriented and located substantially along the x-axis and spaced apart by an x-spacing that is adjustable, for guiding and correctly positioning the user's feet of stances S_1, S_2, S_3 and S_4;

(f) said body engaging means further comprises two elbow-engaging members, each being a truss having an up to 6-axis adjustability, for touching thus correctly positioning the user's elbows of stances S_3 and S_4; and

(g) said framing structure further comprises a balancing bar and a supporting truss oriented substantially parallel to the y-z plane and connected to said balancing bar and said backbone beam, said balancing bar oriented along substantially the y-direction and connected to said two elbow-engaging members, said balancing bar for guiding thus correctly positioning the user's fists of stances S_1 and S_2 through fist gripping.

such that the achievement and holding of stances S_3 and S_4 provides the following health benefits:

(3) direct development of stronger body muscles and better body flexibility; and

(4) indirect strengthening of the bladder muscles and nerves causing a reduction of frequent and excess habitual urination

and the achievement and holding of stances S_1 and S_2, respectively being an intermediary of stance S_3 and stance S_4, provides the following health benefits:

(5) direct development of stronger body muscles and better body flexibility; and

(6) increasing the easiness and efficiency for bridging stances S_1 to S_3 and for bridging stances S_2 to S_4.

17. The stance guide of claim 16 wherein said hand engaging means further comprises a hand loop oriented substantially in the x-y plane and adjustably, in the z-direction, connected to said framing structure, said hand loop being disposed for guiding and correctly positioning the user's open-palmed hand of stances S_3 and S_4.

18. The stance guide of claim 16 wherein at least one of said front foot panel and said rear foot panel further comprise a foot engagement sensing and signaling device attached thereto for sensing and signaling the correctness of engagement of at least one of user's feet.

19. The stance guide of claim 18 wherein the location of said sensing and signaling device is adjustable in the x-y plane.

20. The stance guide of claim 18 wherein the foot engagement sensing function of said sensing and signaling device is implemented with a mechanical switch, a linear position sensor, an angle sensor, an optical interrupter, an acoustic interrupter, a capacitive proximity sensor, a piezoelectric force sensor.

21. The stance guide of claim 18 wherein the signaling function of said sensing and signaling device is implemented with an audible device, a display device or a body-stimulating device.

22. The stance guide of claim 16 wherein the backbone beam further comprises a stabilizing bar attached to the rear end of said backbone beam and extending substantially in the y-direction therefrom for stabilizing the stance guide.

23. The stance guide of claim 16 wherein each of said foot engaging means, said body engaging means and said framing structure is made of material selected from the group consisting of metal, plastic, wood, glass or ceramic.

24. The stance guide of claim 16 wherein, for said health benefit to be significant, the holding period for said stances S_1 and S_2 are further recommended to be progressed from about one (1) minute to about ten (10) minutes a day.

25. The stance guide of claim 16 wherein, for said health benefit to be significant, the holding period for said stances S_3 and S_4 are further recommended to be progressed from about one (1) minute to about ten (10) minutes each time with a range of practicing frequency to be progressed from about two (2) times to about ten (10) times a day.

26. The stance guide of claim 5 wherein said stances S_j comprise S_5, S_6, S_7 and S_8 being characterized by, with an x-y-z Cartesian coordinate wherein the x-direction is where the user body faces, the y-direction runs from the user's right shoulder toward his left shoulder and the z-direction runs vertically upwards:

(a) S_5: right heel against the ground, left foot in front of right foot, left knee bent with left foot as high in the air as possible, right knee bent as much as possible, overall back leaned slightly forward, upper back and shoulders relaxed, both upper arms tilted in the y-z plane so as to slightly open up the arm pits with both lower arms pointing in the x-direction and both hands forming a gripping position as if pushing a wheel barrel;

(b) S_6: mirror image of S_5 regarding left/right foot and left/right arm;

(c) S_7: feet, legs and overall back same as S_5, upper back arched and shoulders curved forward, upper arms naturally down, upper left arm ahead of upper right arm with left elbow slightly ahead of left wrist, left hand in an open-palm, Christian style praying orientation except having a bent thumb, in the x-direction, and having an index finger separated from the rest of the fingers, left thumb positioned at the same height as but about five (5) inches ahead of the heart, lower right arm pointing approximately in the y-direction with right elbow slightly ahead of right wrist, right hand made into a fist with palm side up and positioned about three (3) inches below the user's belly button; and

(d) S_8: mirror image of S_7 regarding left/right foot and left/right arm

and wherein, accordingly:

(e) said foot engaging means further comprises a front foot panel, a center foot panel and a rear foot panel, connected to one another by a backbone beam with all panels oriented and located substantially along the x-axis and spaced apart by an adjustable front x-spacing and an adjustable rear x-spacing, for guiding and correctly positioning the user's feet of stances S_5, S_6, S_7 and S_8;

(f) said body engaging means further comprises two elbow-engaging members, each being a truss having an up to 6-axis adjustability, for touching thus correctly positioning the user's elbows of stances S_7 and S_8; and

(g) said framing structure further comprises a balancing bar and a supporting truss oriented substantially parallel to the y-z plane and connected to said balancing bar and said backbone beam, said balancing bar oriented along substantially the y-direction and connected to said elbow-engaging members, said balancing bar further comprising two end grips, each pointing in the negative x-direction, for guiding thus correctly positioning the user's hands of stances S_5 and S_6 through fist gripping

such that the achievement and holding of stances S_7 and S_8 provides the following health benefits:

(1) direct development of stronger body muscles and better body flexibility; and
(2) indirect enhancement of sleep quality and reduction of body weight

and the achievement and holding of stances S_5 and S_6, respectively being an intermediary of stance S_7 and stance S_8, provides the following health benefits:

(3) direct development of stronger body muscles and better body flexibility; and
(4) increasing the easiness and efficiency for bridging stances S_5 to S_7 and for bridging stances S_6 to S_8.

27. The stance guide of claim 26 wherein said hand engaging means further comprises a hand loop oriented substantially in the x-y plane and adjustably, in the z-direction, connected to said framing structure, said hand loop being disposed for guiding and correctly positioning the user's open-palmed hand of stances S_7 and S_8.

28. The stance guide of claim 26 wherein at least one of said front foot panel and said rear foot panel further comprise a foot engagement sensing and signaling device attached thereto for sensing and signaling the correctness of engagement of at least one of user's feet.

29. The stance guide of claim 28 wherein the location of said sensing and signaling device is adjustable in the x-y plane.

30. The stance guide of claim 26 wherein the backbone beam further comprises a stabilizing bar attached to the rear end of said backbone beam and extending substantially in the y-direction therefrom for stabilizing the stance guide.

31. The stance guide of claim 26 wherein, for said health benefit to be significant, the holding period for said stances S_5 and S_6 are further recommended to be progressed from about one (1) minute to about ten (10) minutes a day.

32. The stance guide of claim 26 wherein, for said health benefit to be significant, the holding period for said stances S_7 and S_8 are further recommended to be progressed from about one (1) minute to about ten (10) minutes each time with a range of practicing frequency to be progressed from about two (2) times to about ten (10) times a day.

33. A method of helping a person achieve and hold one or more pre-determined stances S_j, where j = (1, 2, . . . N) and N >=1, such that the achievement and holding of each S_j provides a corresponding health benefit to the person, the method comprising:

(a) providing a foot engaging means for guiding and engaging at least one foot of the person;

(b) providing a body engaging means for guiding and engaging at least one part of the person's body;

(c) providing a framing structure properly dimensioned and properly connected to the foot engaging means and the body engaging means; and

(d) for each stance S_j, providing a corresponding instruction I_j, where j = (1, 2, . . . N) and N >=1, to the person for achieving and holding said S_j while engaging said foot engaging means and said body engaging means

thereby helping the person achieve and hold said S_j.

34. The method of claim 33 wherein providing said foot engaging means further comprises making the structural dimensions of the foot engaging means relevant to guiding and engaging the person's feet and body adjustable thereby accommodating a pre-determined range of user body and feet variation.

35. The method of claim 33 wherein providing said body engaging means further comprises making the structural dimensions of the body engaging means relevant to guiding and engaging the person's feet and body adjustable thereby accommodating a pre-determined range of user body and feet variation.

36. The method of claim 33 wherein providing said framing structure further comprises making the structural dimensions of the framing structure relevant to guiding and engaging the person's feet and body adjustable thereby accommodating a pre-determined range of user body and feet variation.

37. The method of claim 33 wherein providing said body engaging means further comprises providing a hand engaging means for guiding and engaging at least one of user's hands.

38. The method of claim 33 wherein providing said foot engaging means further comprises providing a foot engagement sensing and signaling means for sensing and signaling the correctness of engagement of the person's feet.

39. The method of claim 38 wherein providing said foot engagement sensing and signaling means further comprises providing a timing device for timing the duration of correct engagement of the user's feet.

40. The method of claim 33 wherein providing said body engaging means further comprises providing a body engagement sensing and signaling means for sensing and signaling the correctness of engagement of the person's body.

41. The method of claim 40 wherein providing said body engagement sensing and signaling means further comprises providing a timing device for timing the duration of correct engagement of the user's body.

42. The method of claim 33 wherein providing said corresponding instruction I_j further comprises providing an optional pre-recorded video medium demonstrating the actual achieving and holding of said stances S_j as a training tool.

43. The method of claim 42 wherein said video medium is a VHS cassette, a DVD disk or a VCD disk.

44. The method of claim 33 wherein providing said corresponding instruction I_j further comprises providing an optional display device, connected to said framing structure, for selectably displaying one or more of said stances S_j as a visual aid to achieving and holding said stances S_j.

45. The method of claim 33 wherein providing said corresponding instruction I_j further comprises providing an optional display device, connected to said body engaging means, for selectably displaying one or more of said stances S_j as a visual aid to achieving and

holding said stances S_j.

46. The method of claim 33 wherein providing said body engaging means further comprises providing a safe guard means for reducing the risk of an accidental fall of the person while trying to achieve and hold said stances S_j.

47. The method of claim 33 wherein providing said framing structure further comprises providing a safe guard means for reducing the risk of an accidental fall of the person while trying to achieve and hold said stances S_j.

48. The method of claim 33 wherein, for said health benefit to be significant, providing said corresponding instruction I_j further comprises providing a pre-determined recommended range of holding period for said stance S_j.

49. The method of claim 33 wherein, for said health benefit to be significant, providing said corresponding instruction I_j further comprises providing a pre-determined recommended range of frequency for practicing said stance S_j.